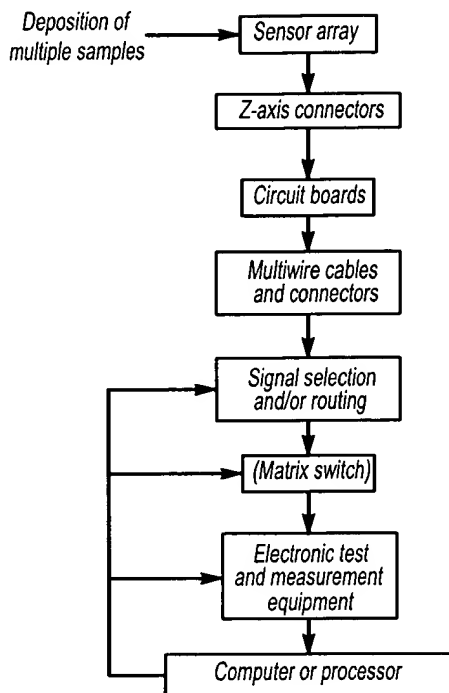
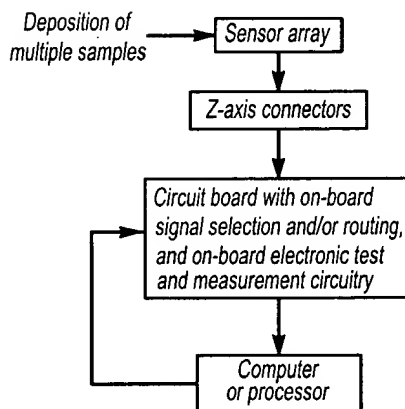


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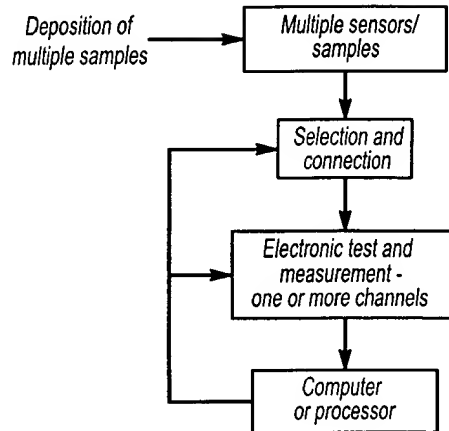
TITLE: APPARATUS FOR RAPID SENSOR-ARRAY BASED MATERIALS CHARACTERIZATION  
 APPLICANTS: PAUL MANSKY ET AL.  
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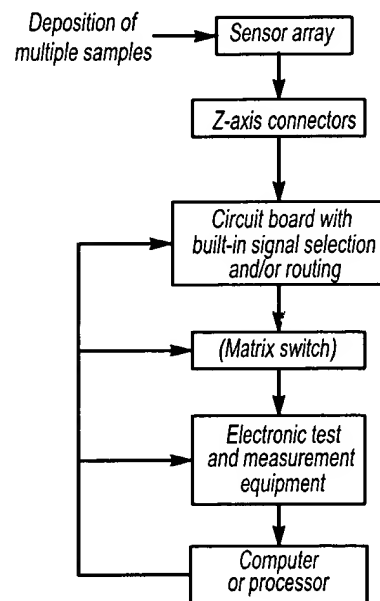
**Fig-1 B**



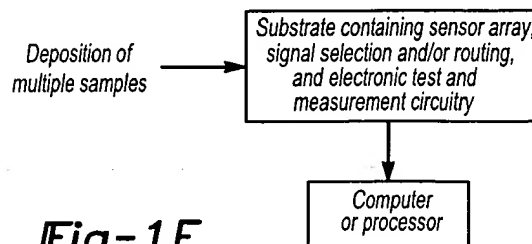
**Fig-1 D**



**Fig-1 A**



**Fig-1 C**



**Fig-1 E**

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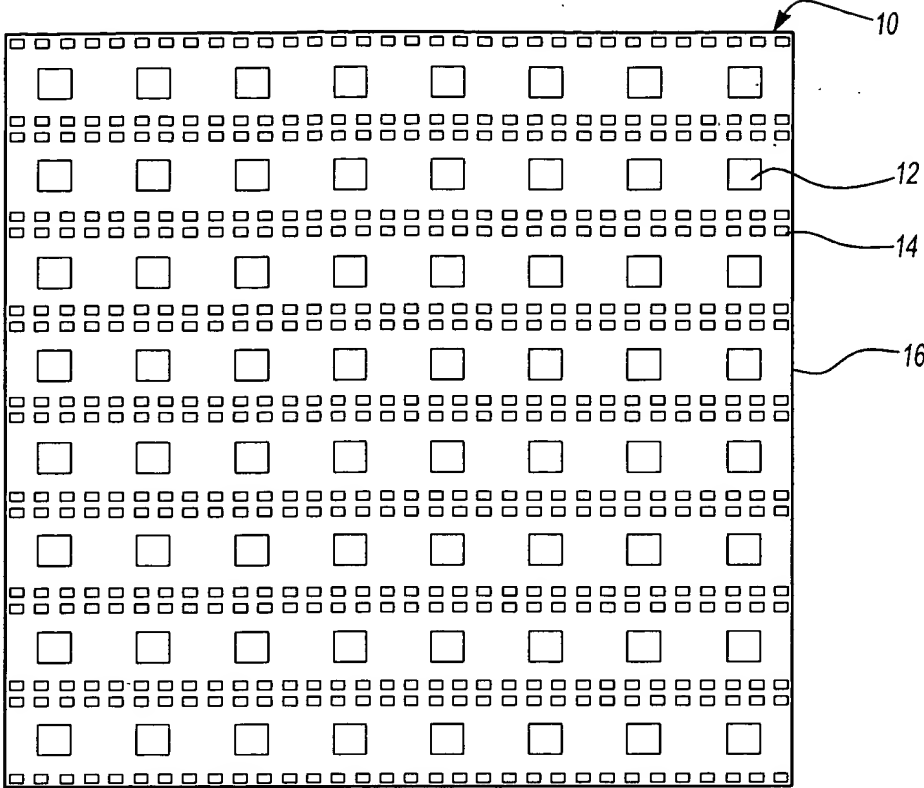


Fig-2A

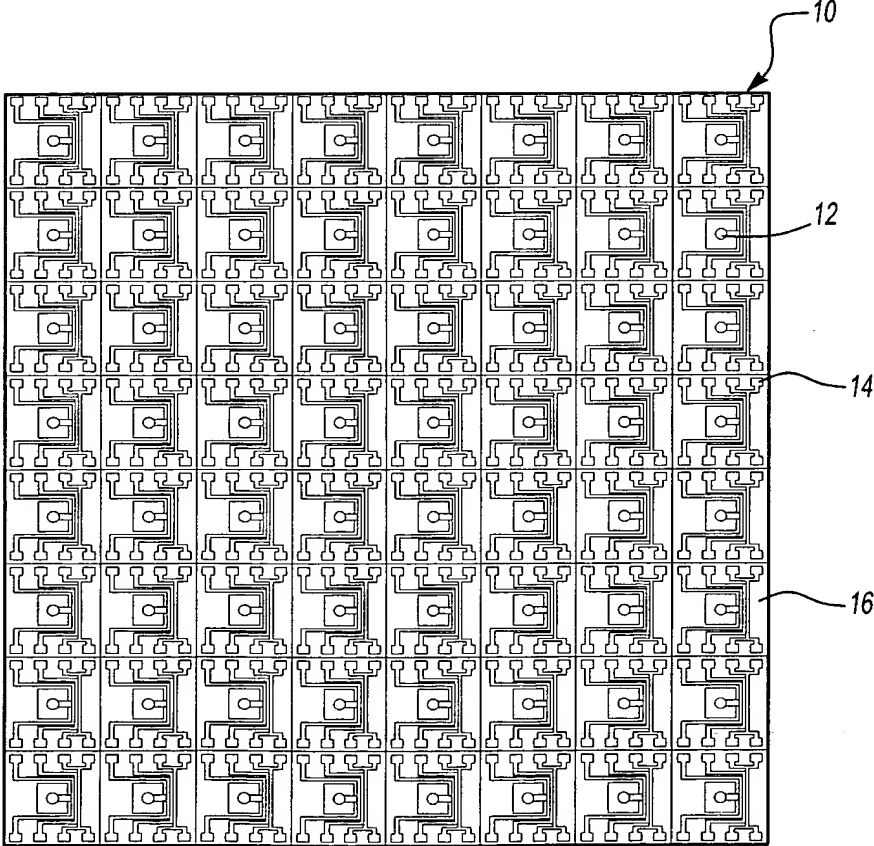
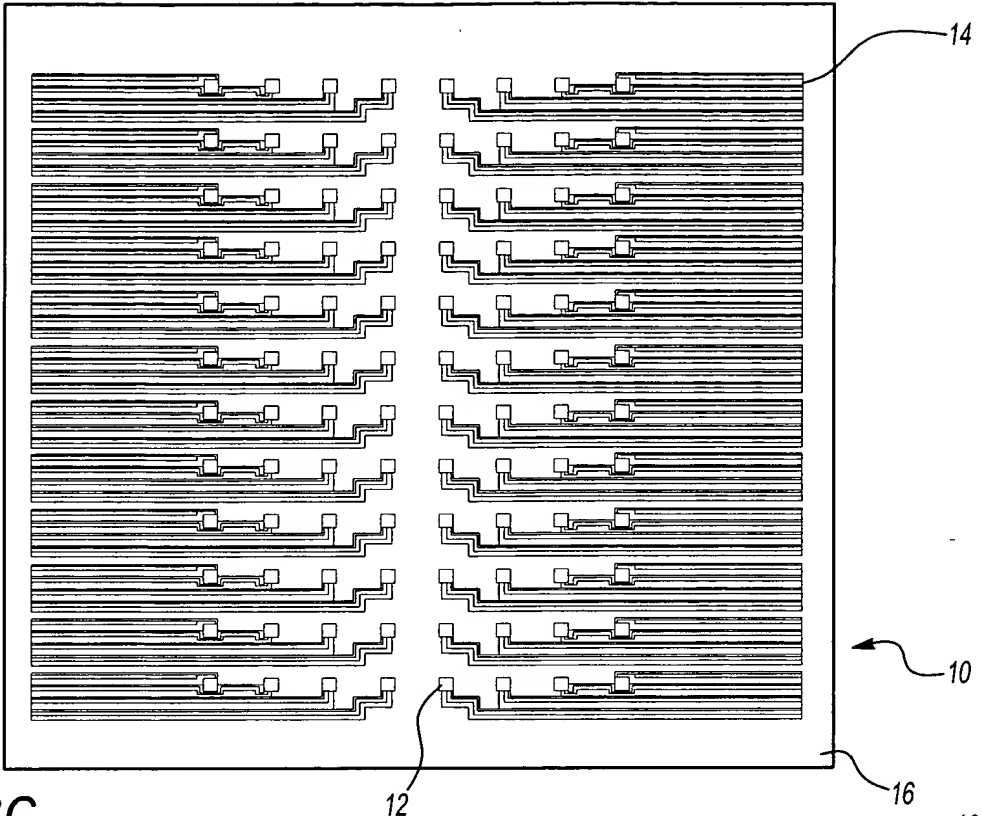
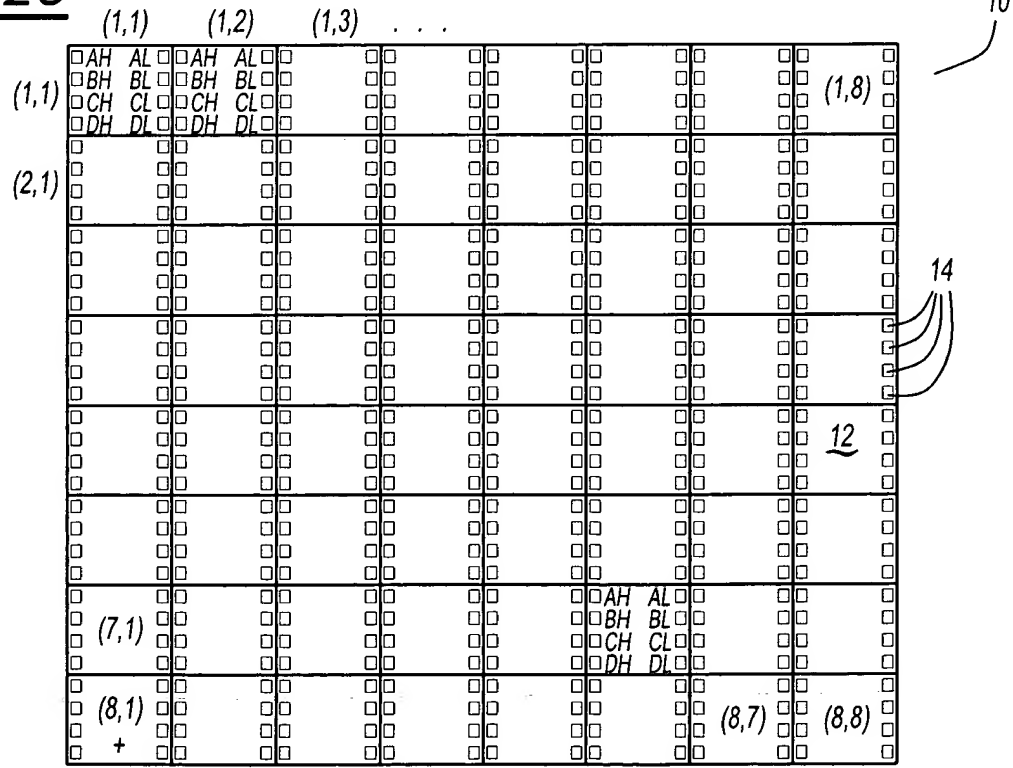


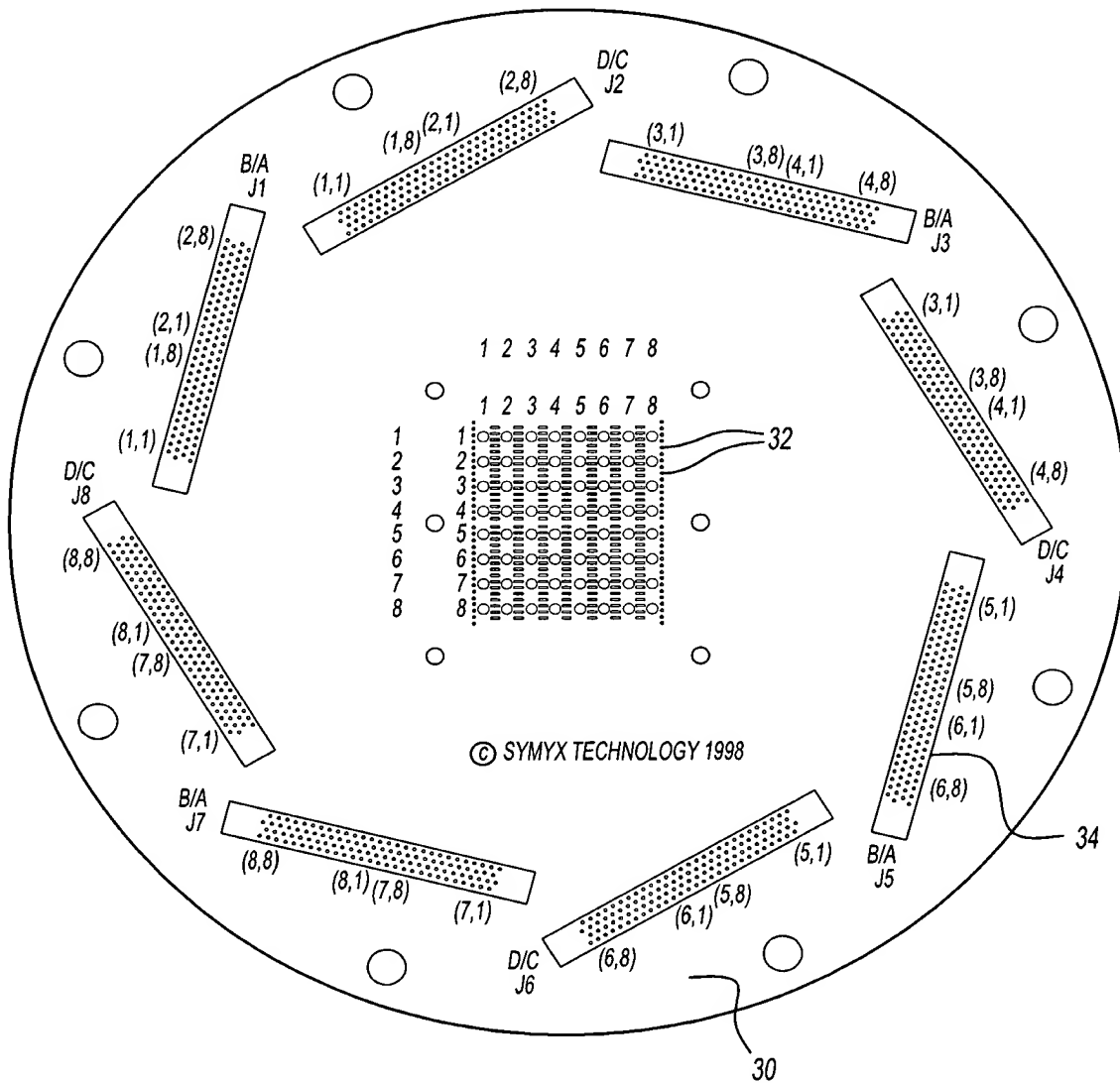
Fig-2B



**Fig-2C**



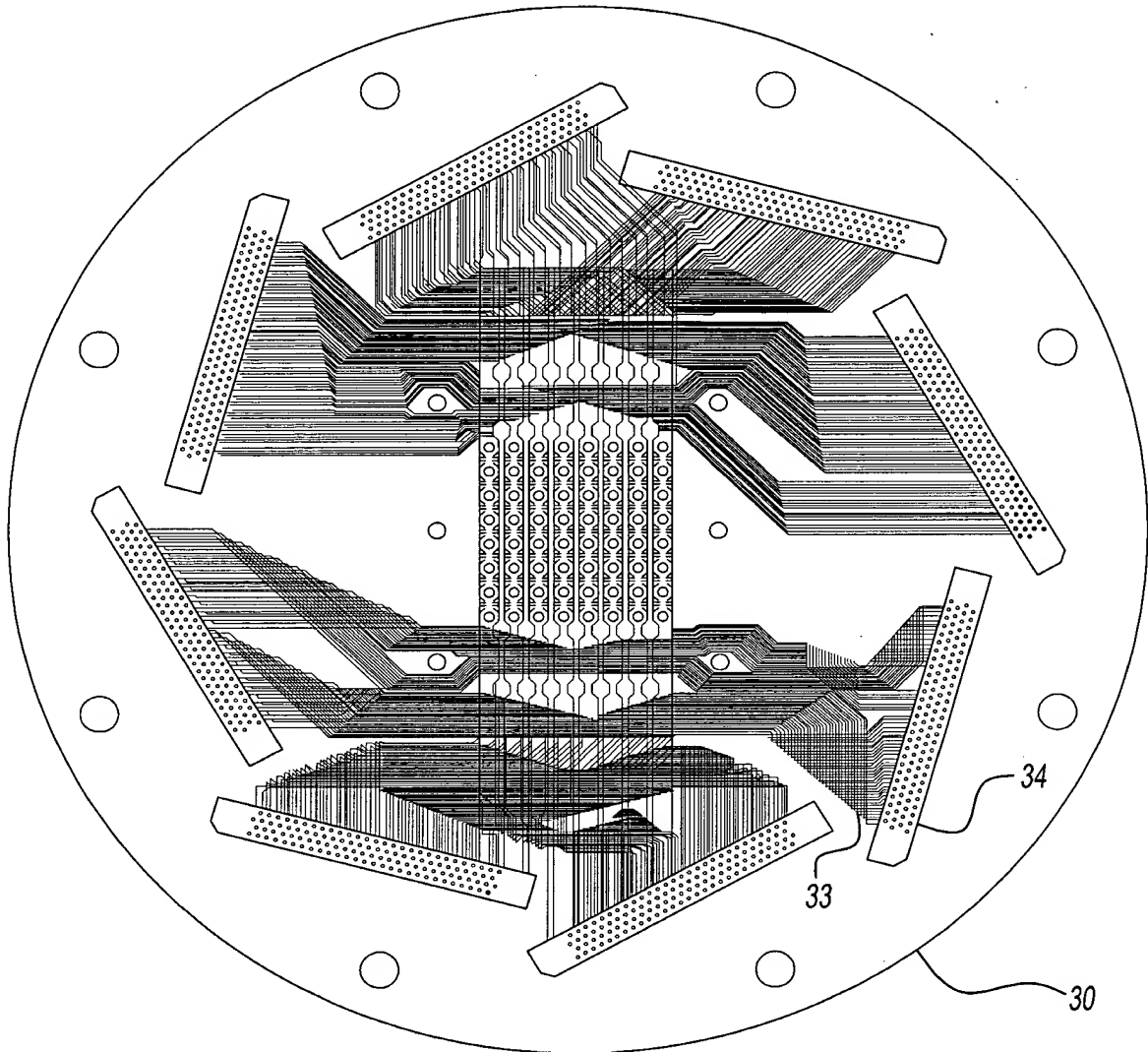
**Fig-2D**



**Fig-3A**

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**Fig-3B**

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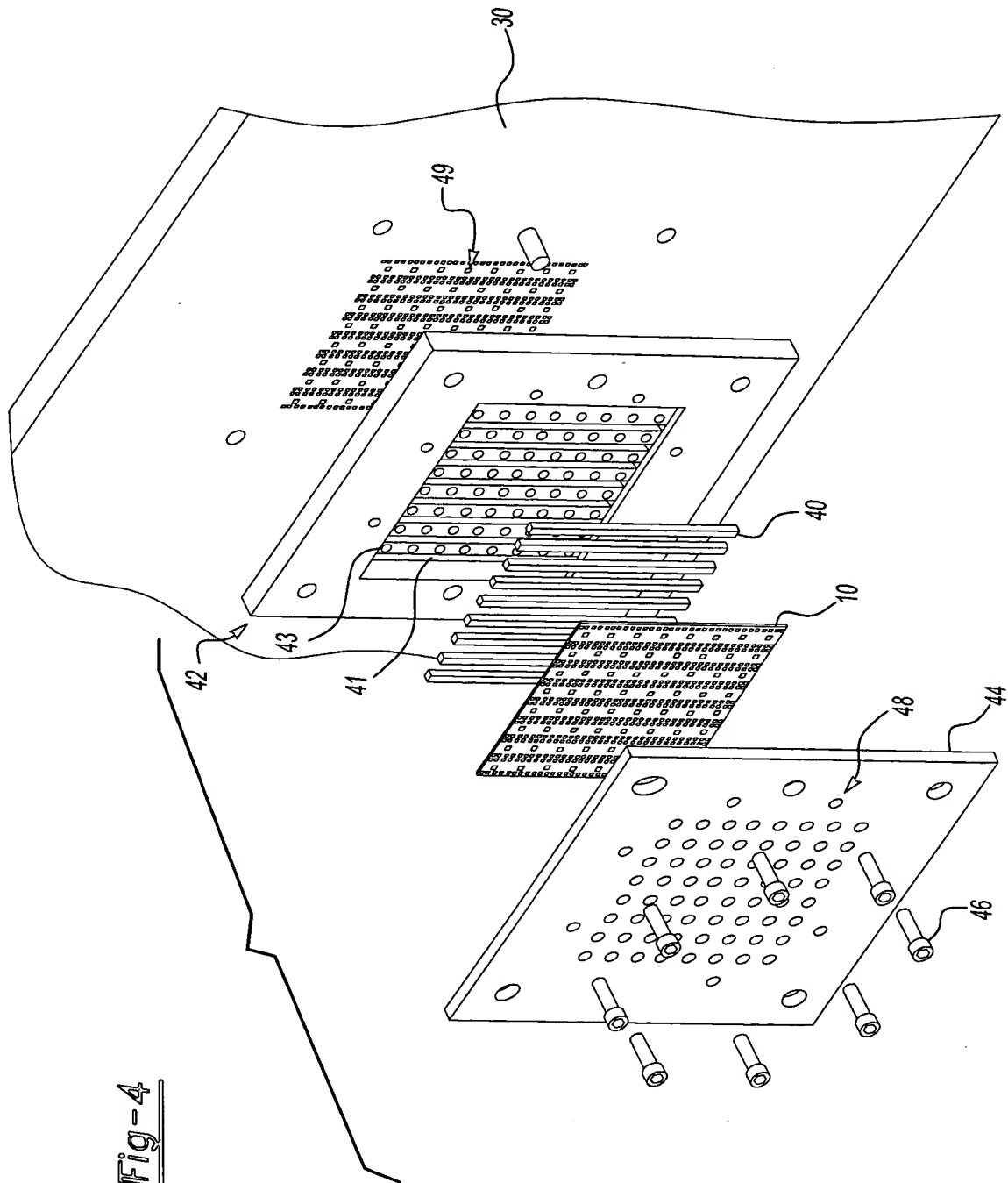
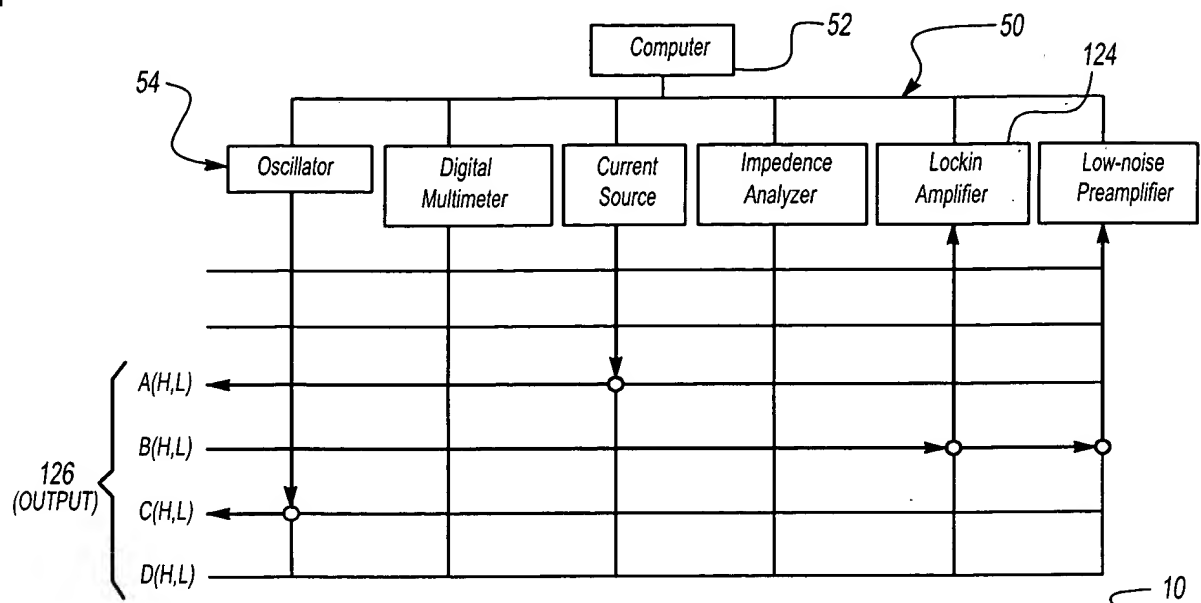
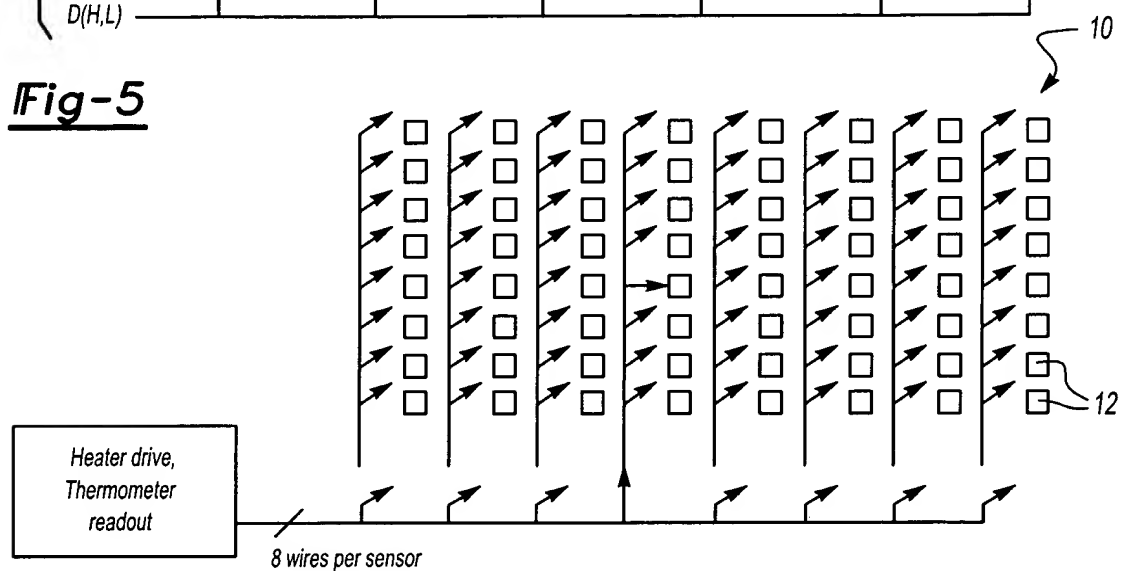


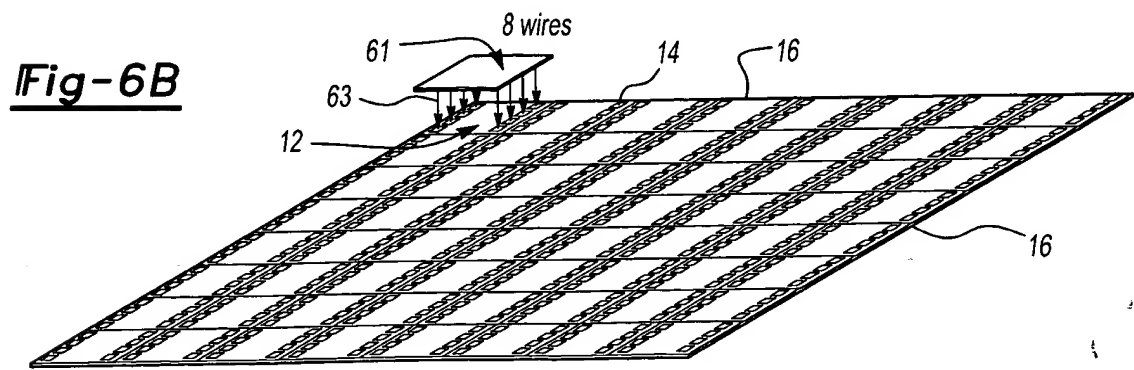
Fig-4



**Fig-5**



**Fig-6A**



**Fig-6B**

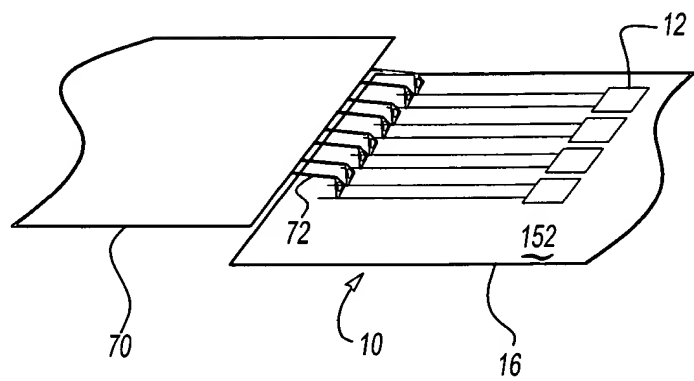


Fig-7

Fig-8

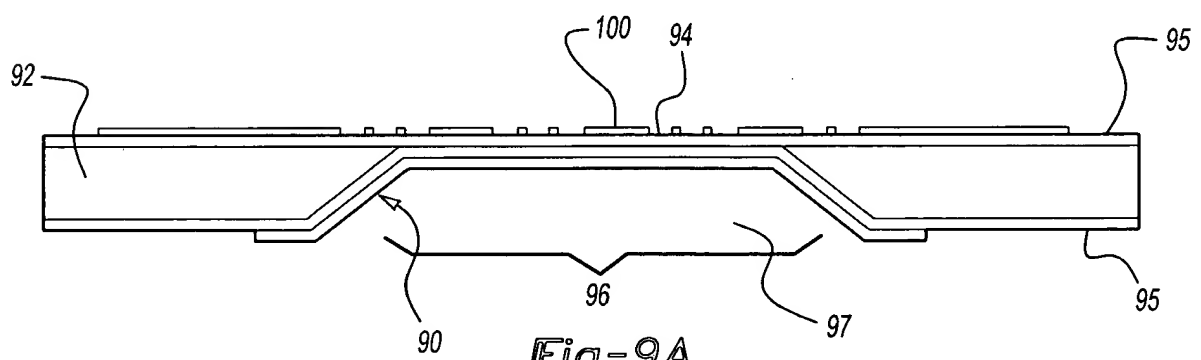
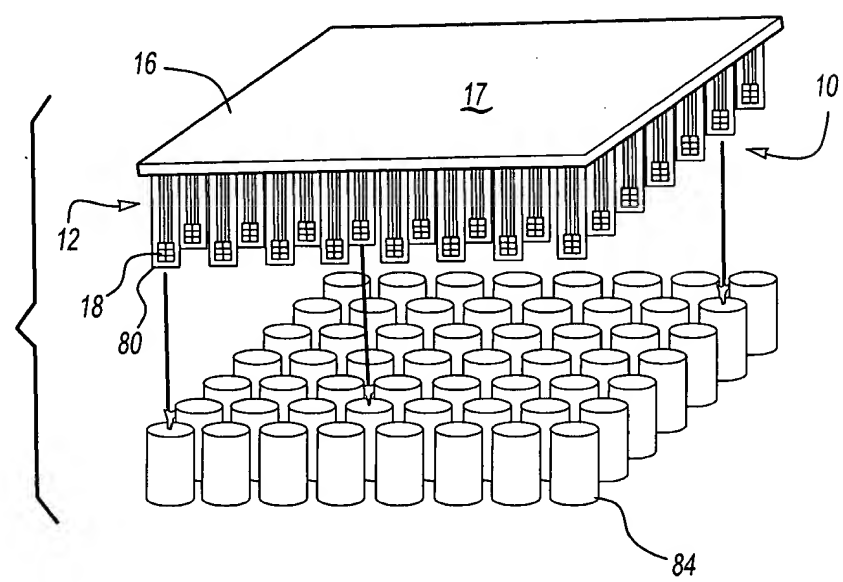


Fig-9A



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APPLICANTS: PAUL MANSKY ET AL.

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Fig-9B

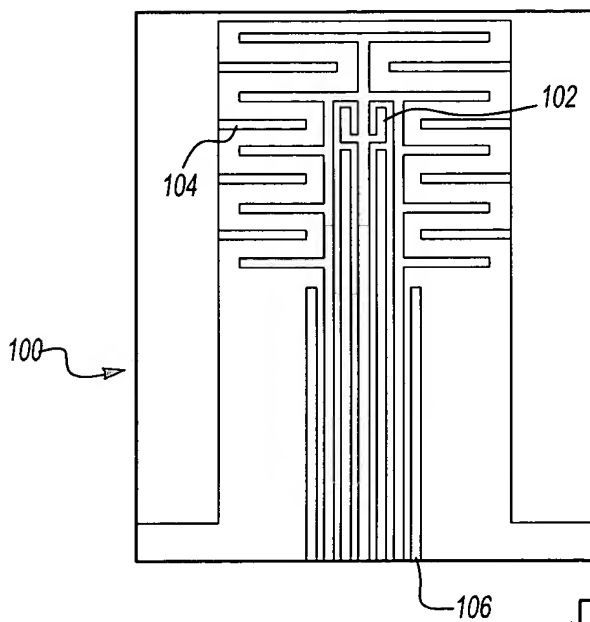
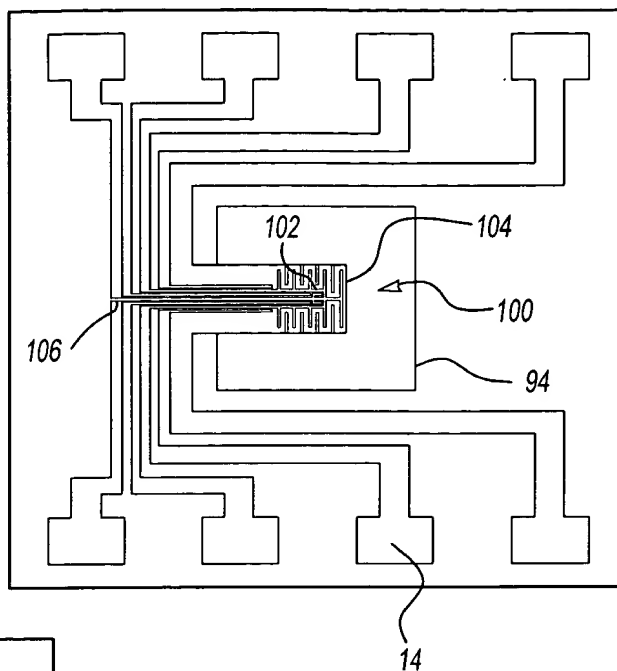
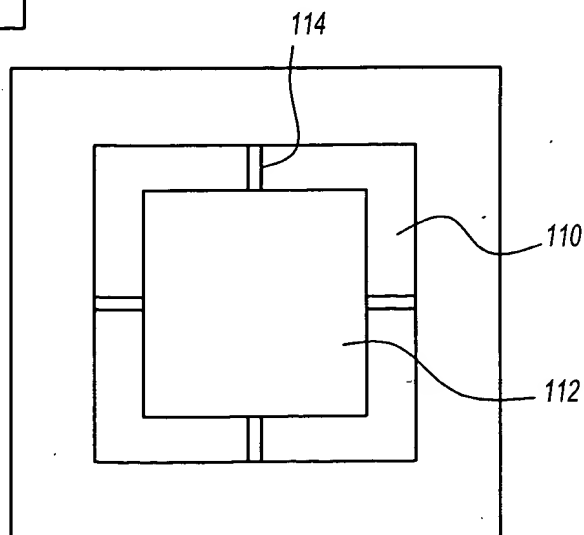


Fig-9C

Fig-10



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Fig-11A

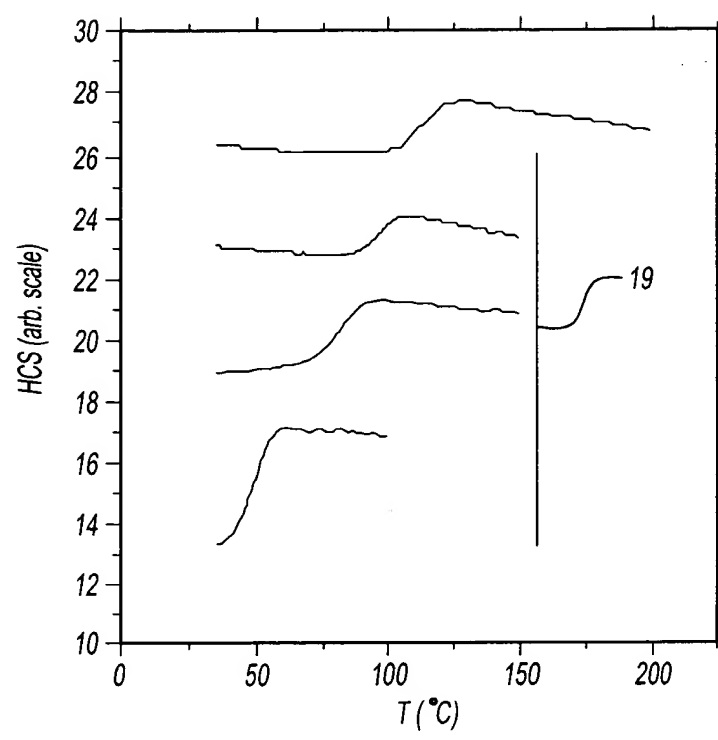
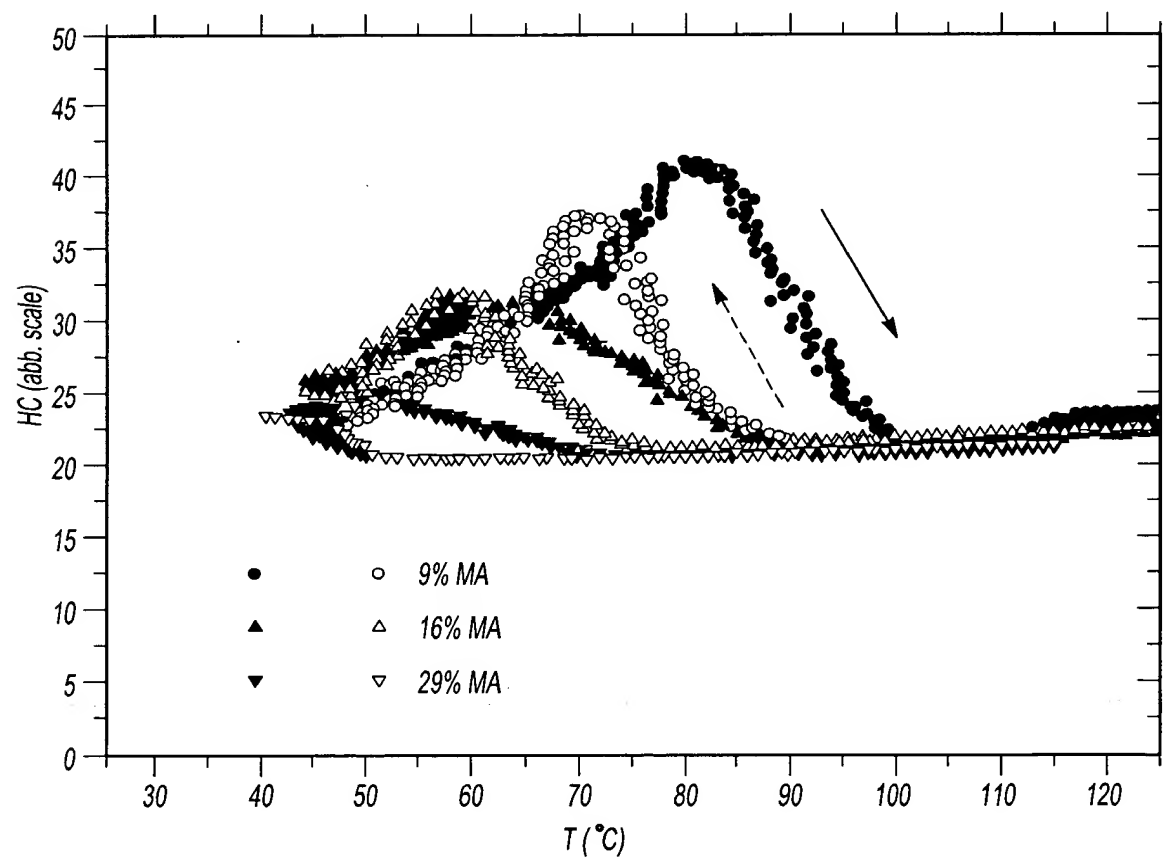


Fig-11B



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CTERIZATION

Fig-11C

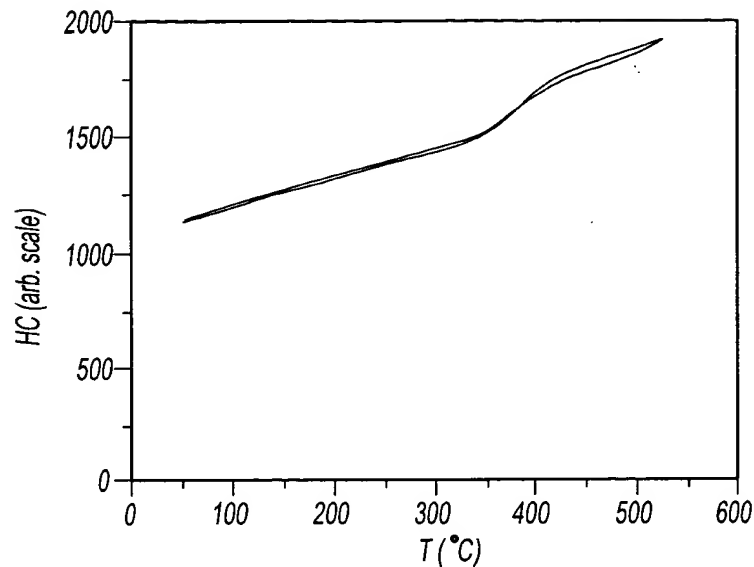


Fig-11D

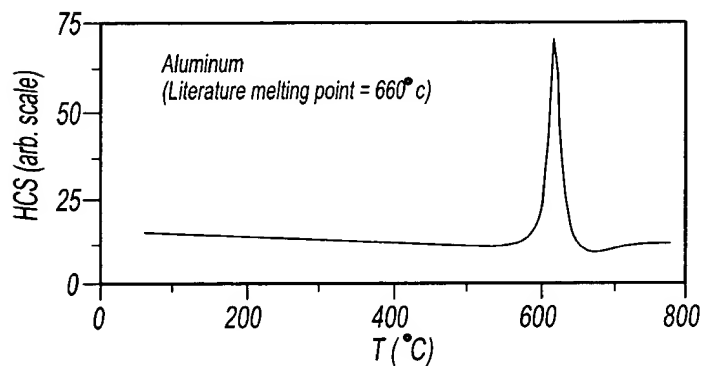


Fig-11E

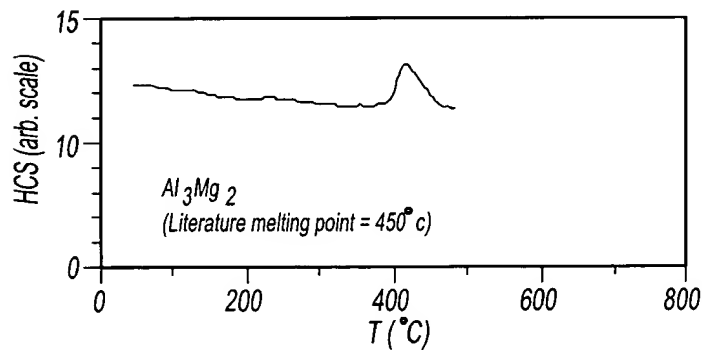
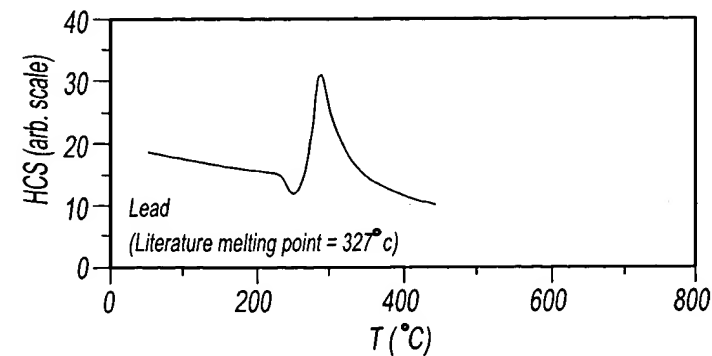
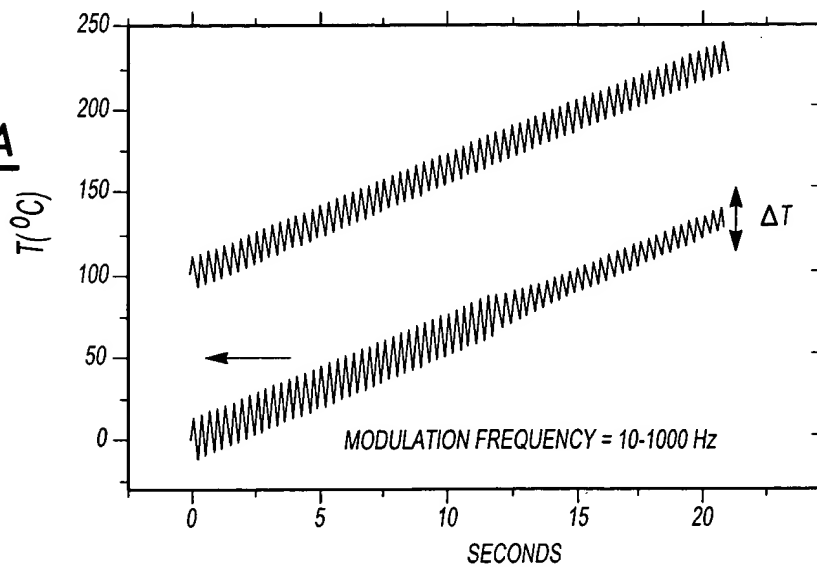


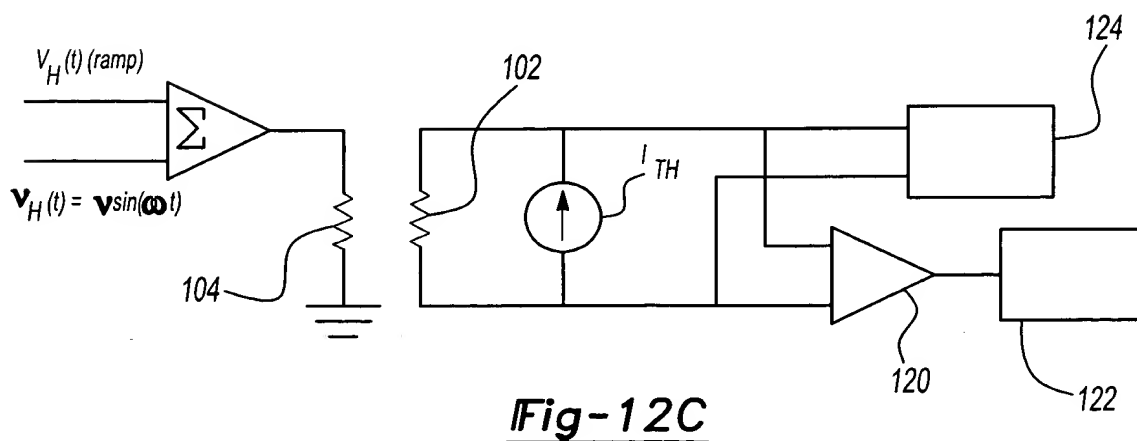
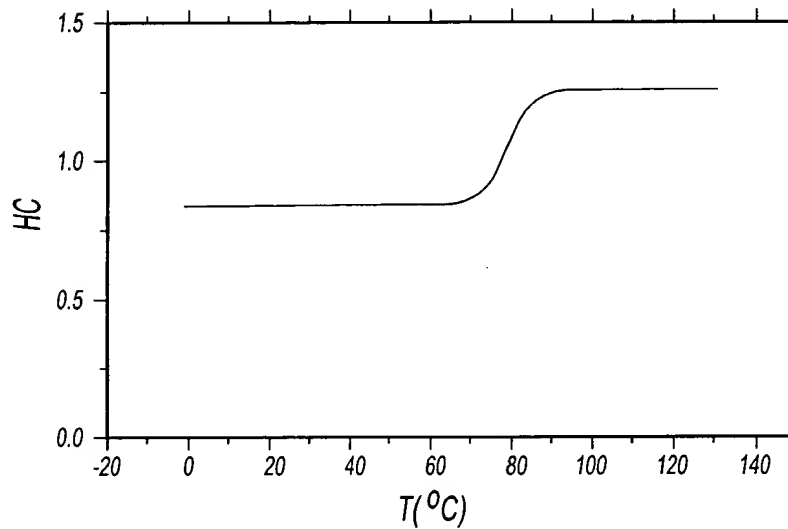
Fig-11F

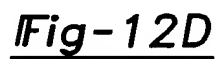


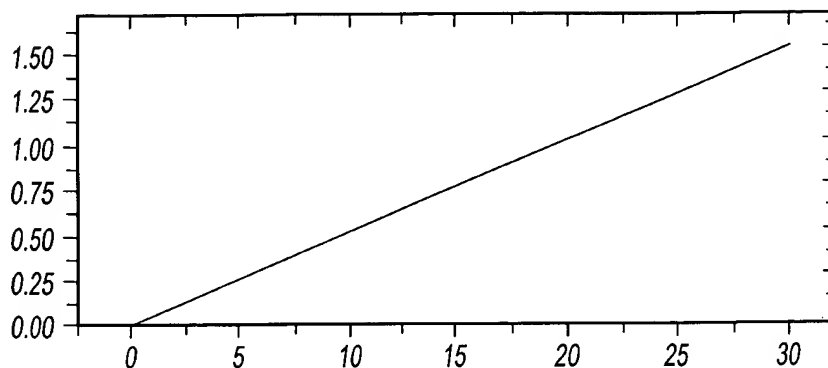
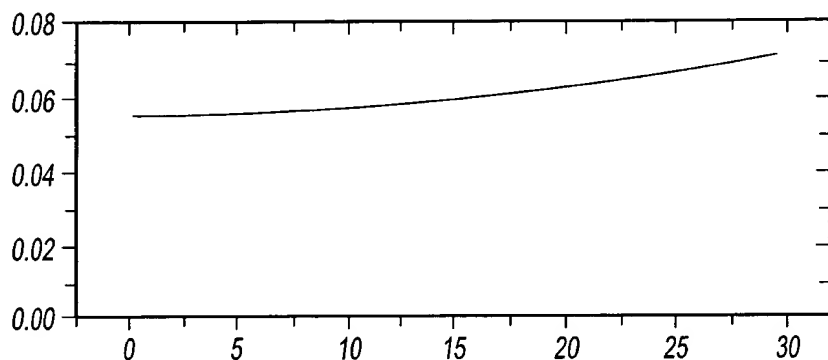
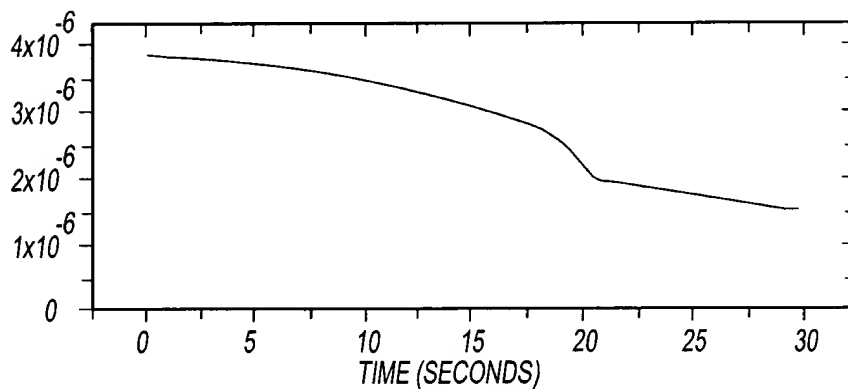
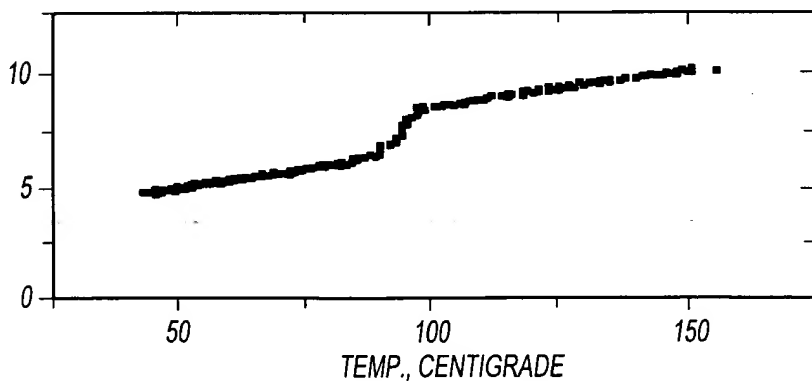
**Fig-12A**



**Fig-12B**





**Fig-12E**DC HEATER  
DRIVE VOLTAGE  
 $V_{H,O}(t)$ **Fig-12F**AVERAGE THER-  
MOMETER VOLTAGE  
 $\langle V_{TH} \rangle$ **Fig-12G** $2\omega$  MODULATION  
VOLTAGE  
 $V_{TH}(2\omega)$ **Fig-12H**HEAT CAPACITY  
(ARB. SCALE)  $C_p$ 

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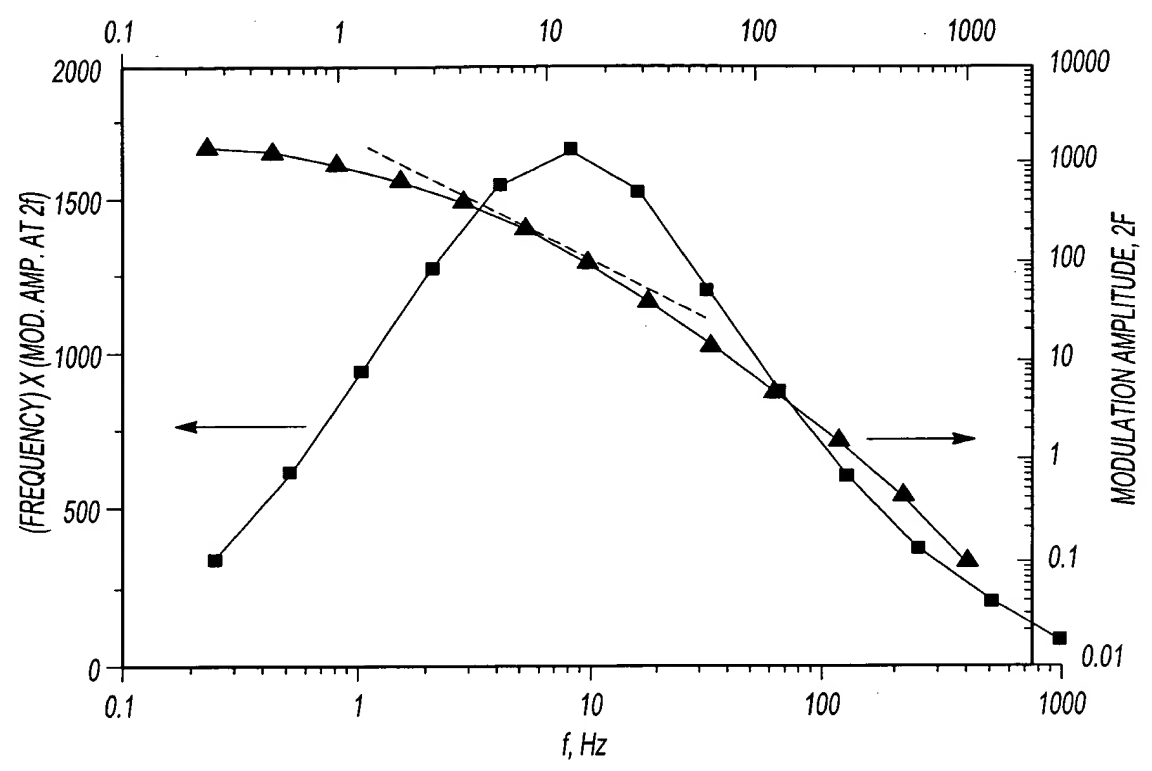
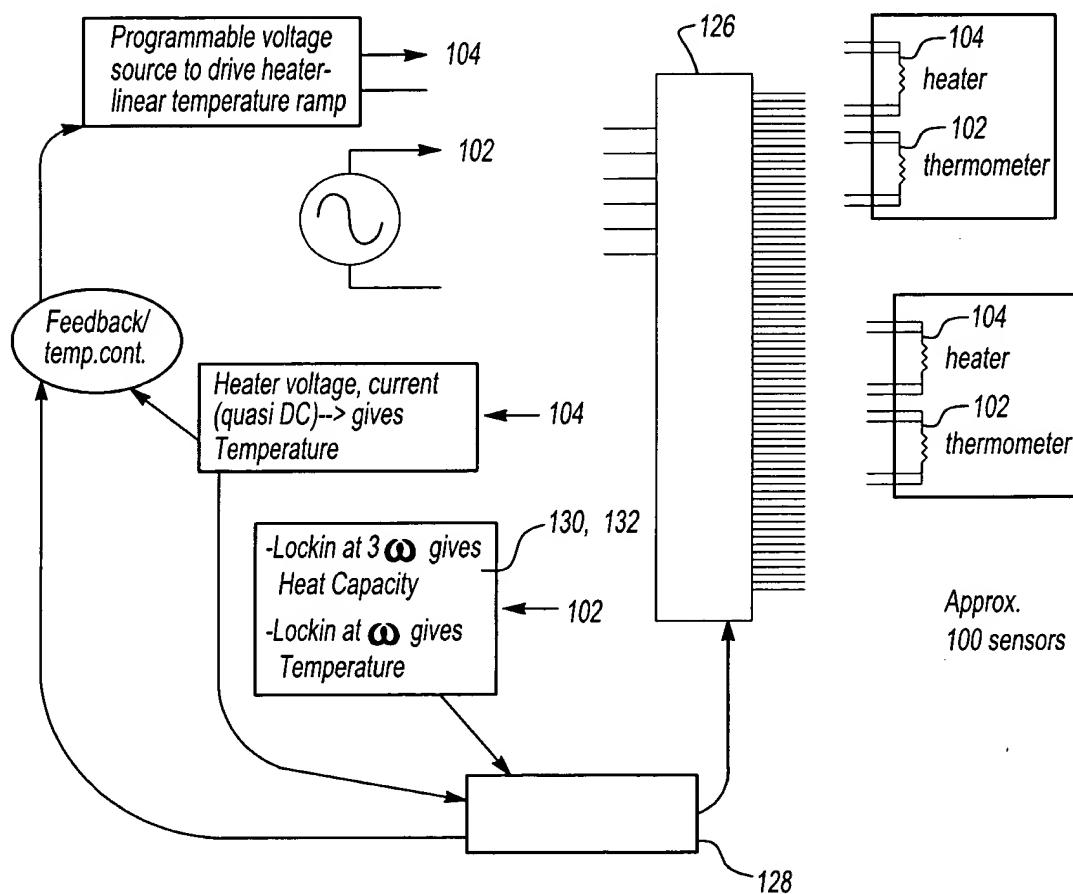
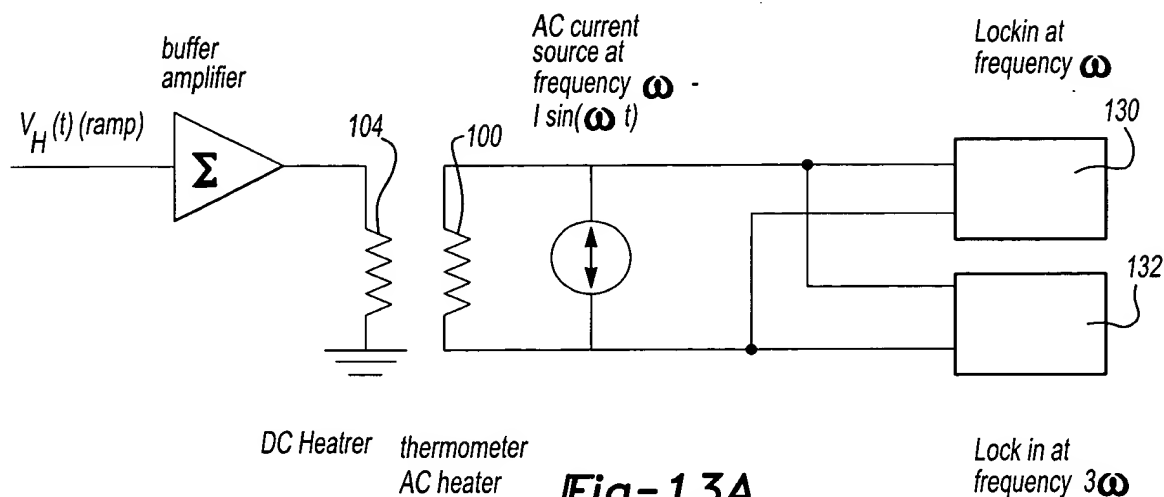
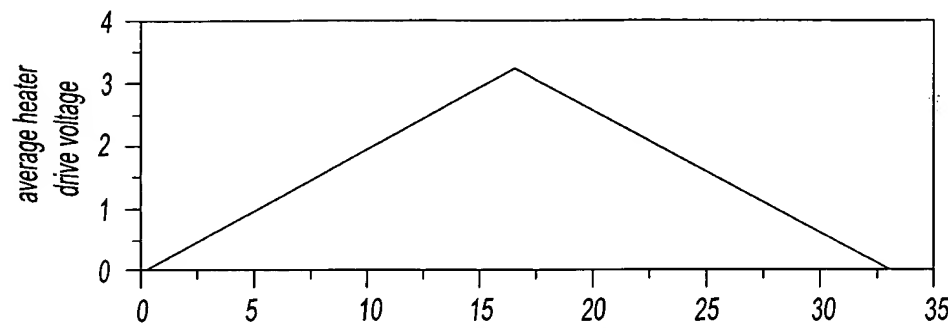


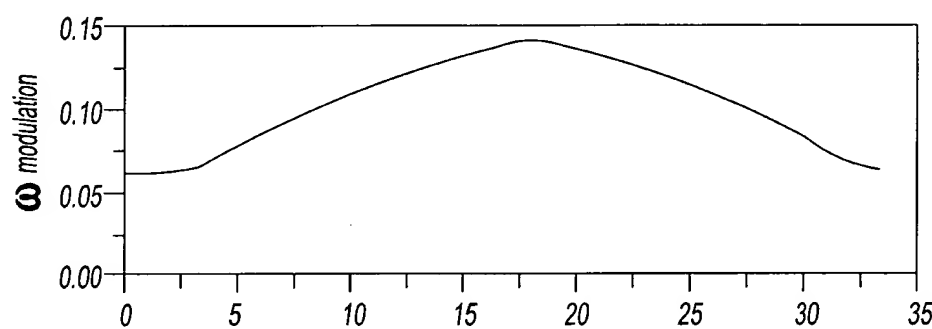
Fig-121



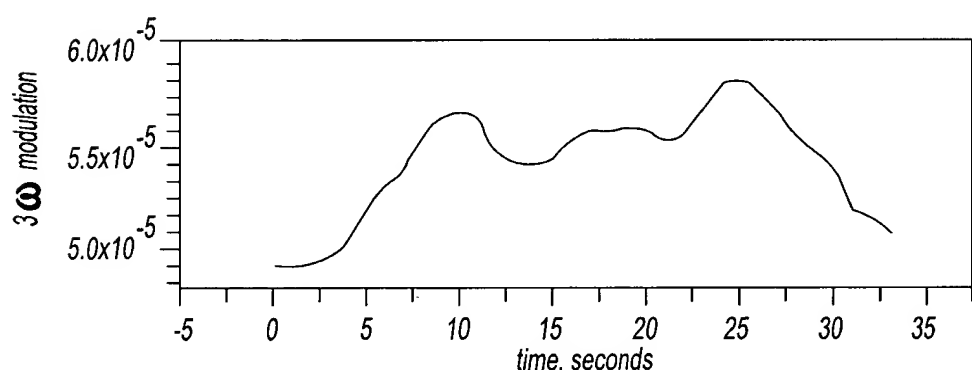




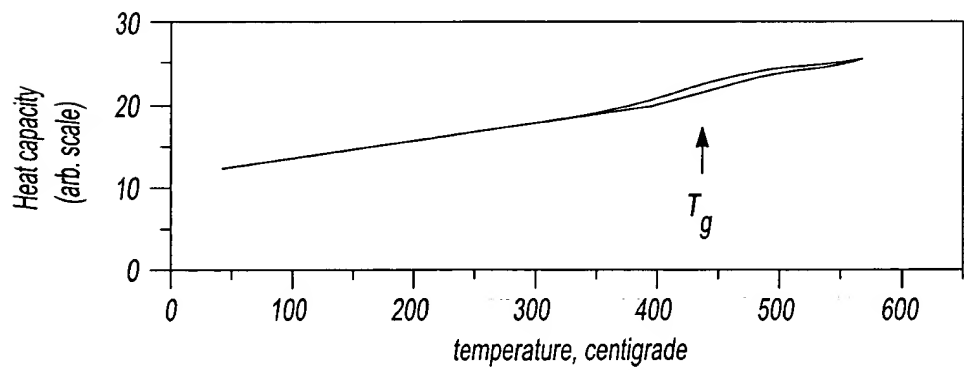
**Fig-13C**



**Fig-13D**



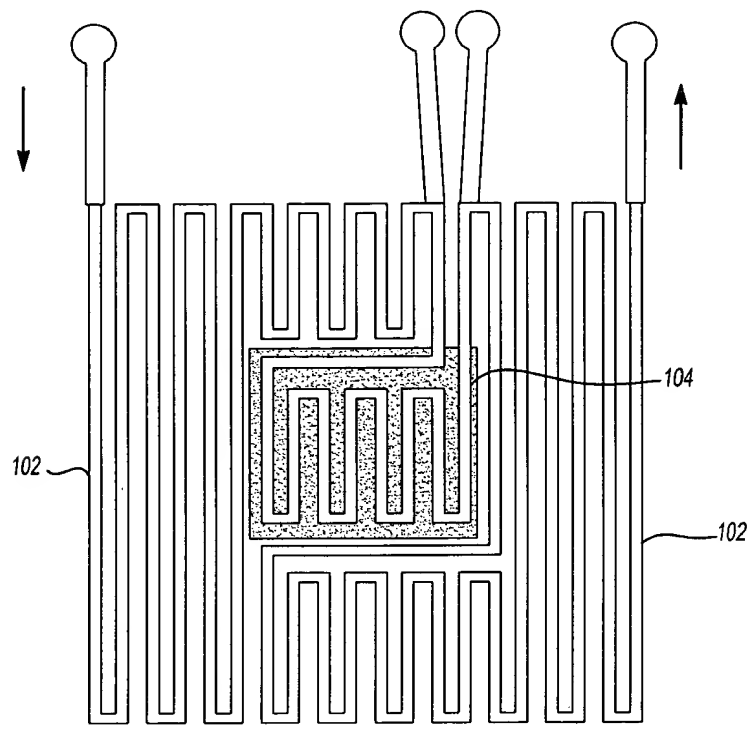
**Fig-13E**



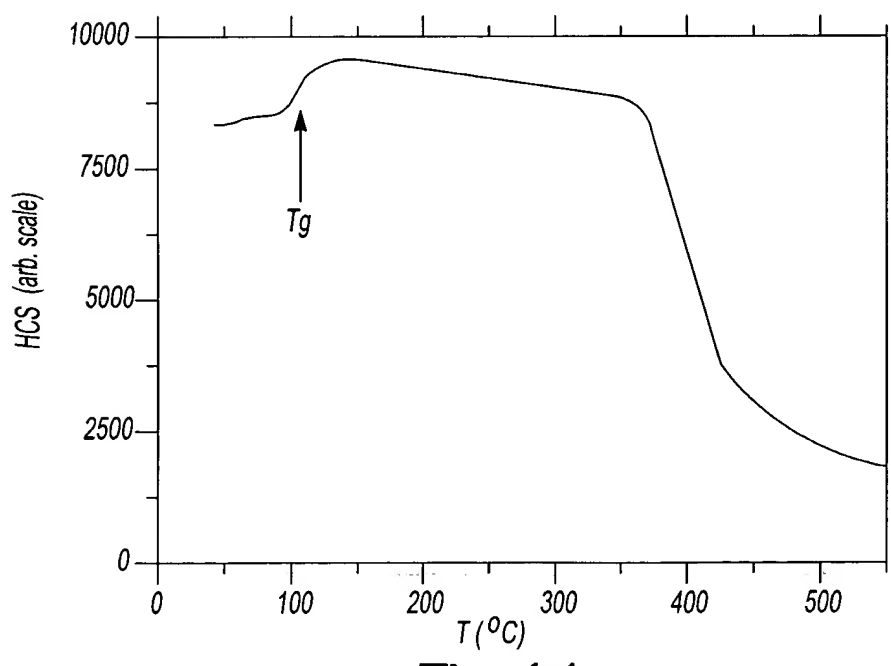
**Fig-13F**

$$I(t) = I_0(t) + I_{AC} \sin(\omega t)$$

$$V_0, V(\omega, 2\omega, 3\omega)$$



**Fig-13G**



**Fig-14**

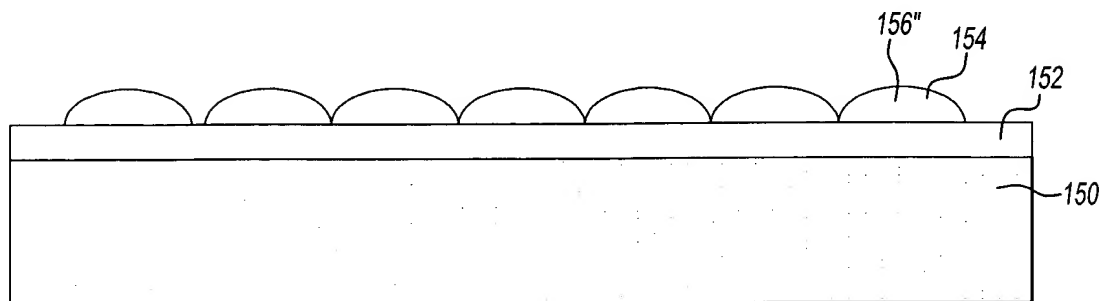


Fig-15A

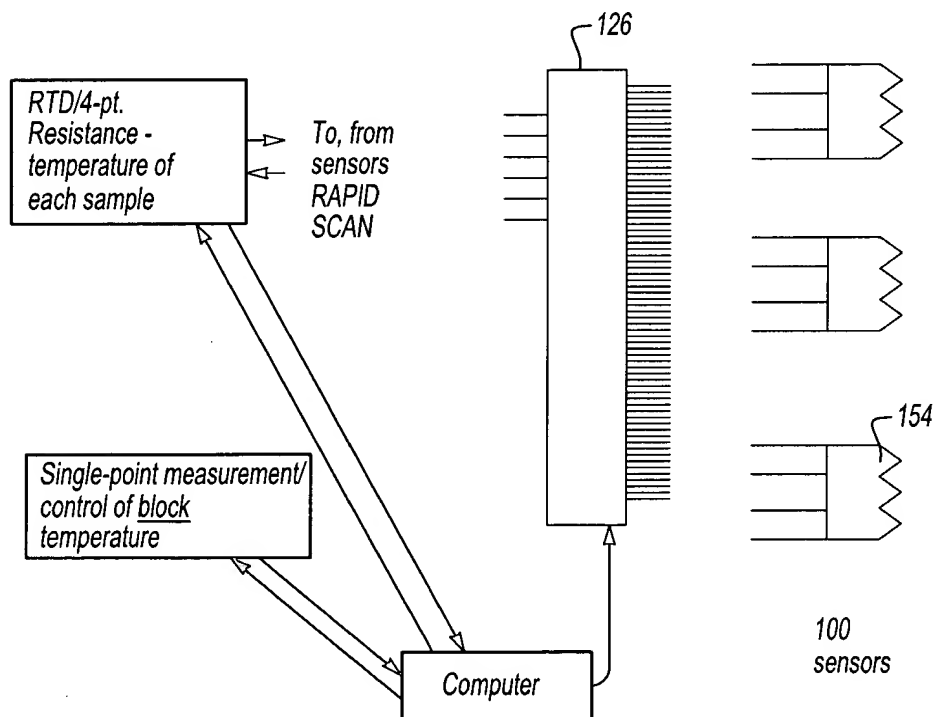
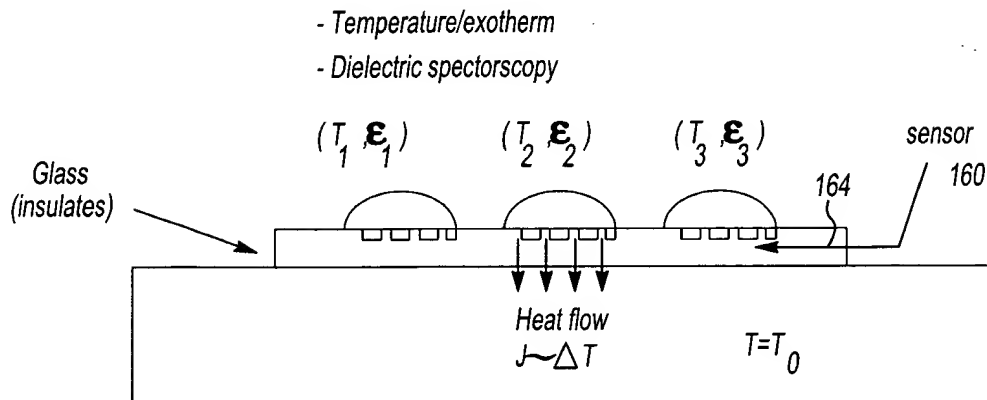
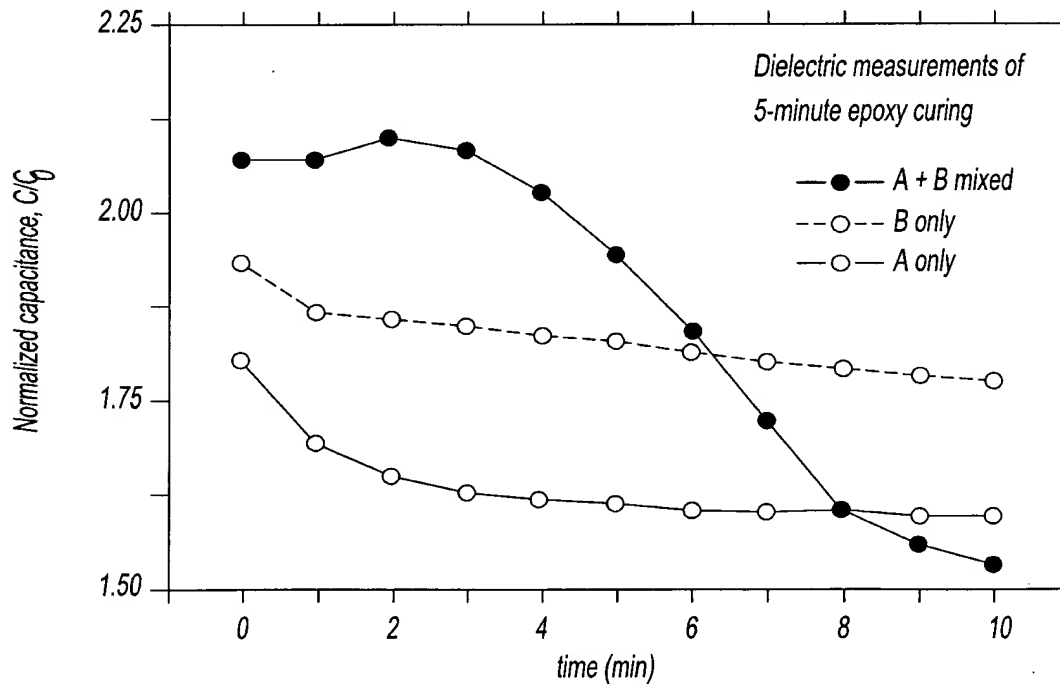


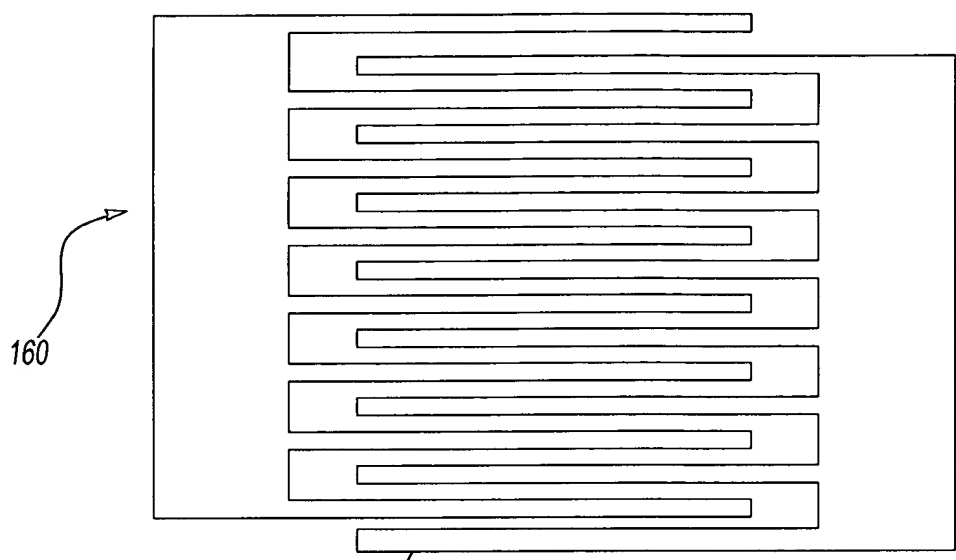
Fig-15B



**Fig-16A**



**Fig-16B**



162 Fig-16C

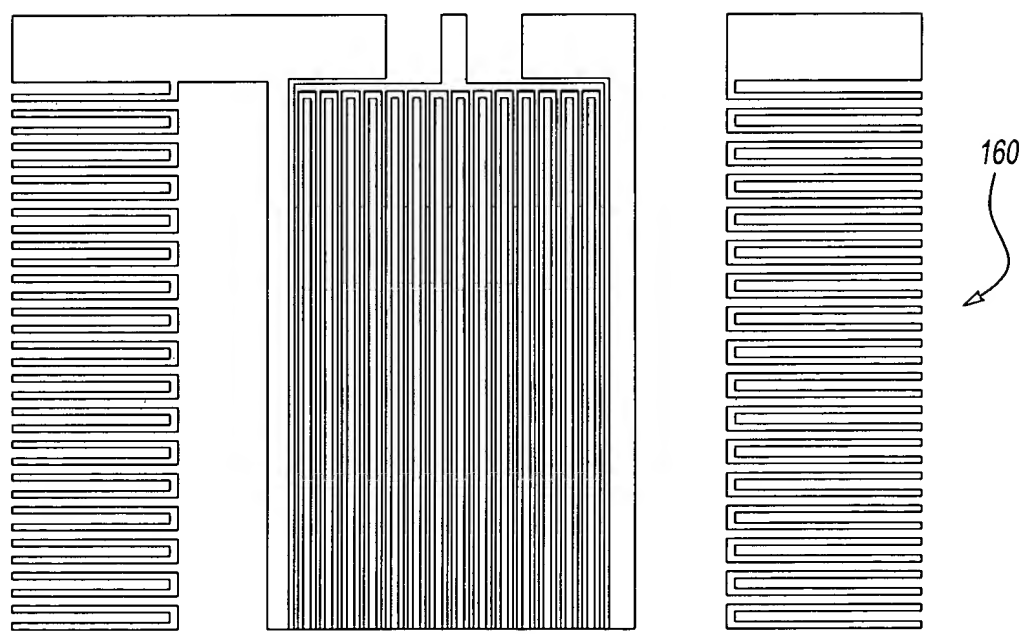
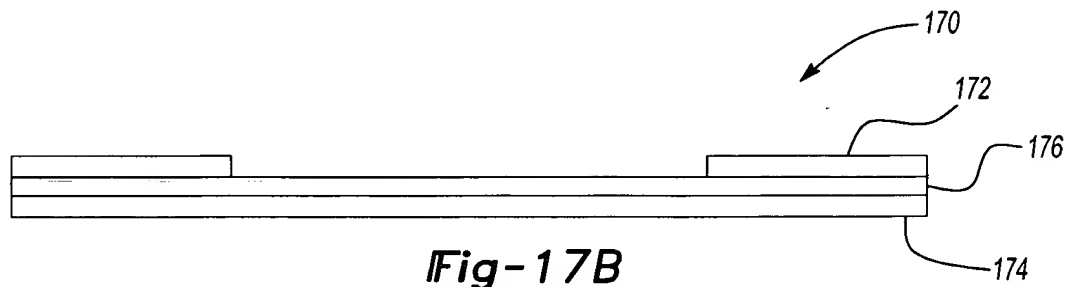
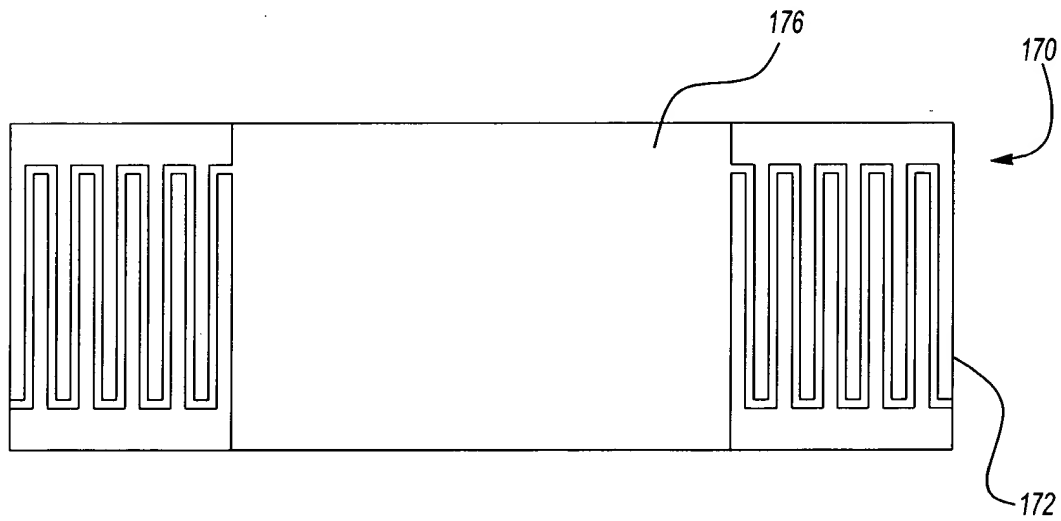
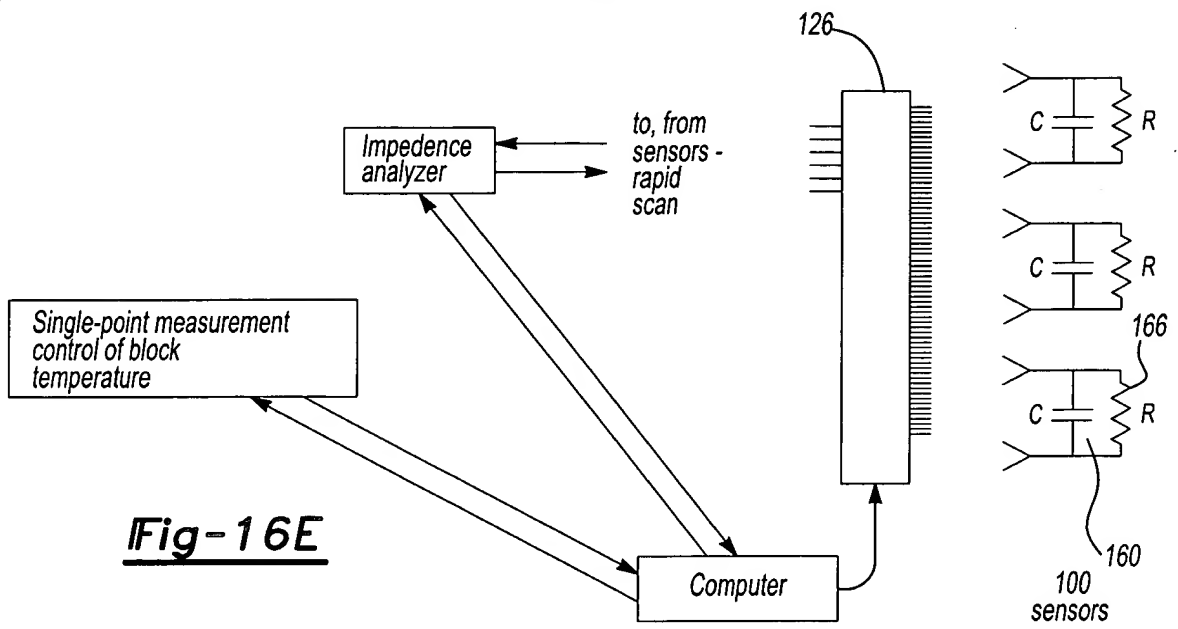
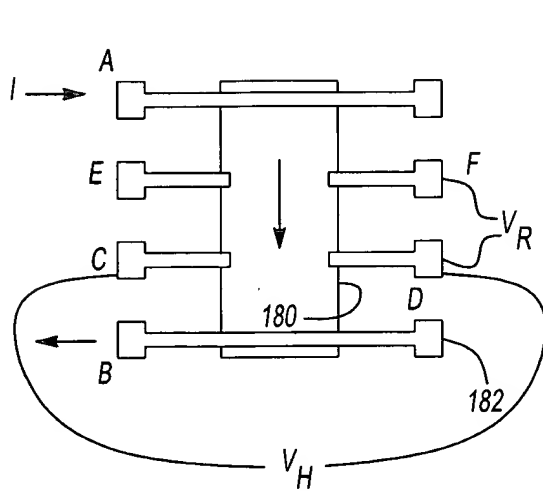
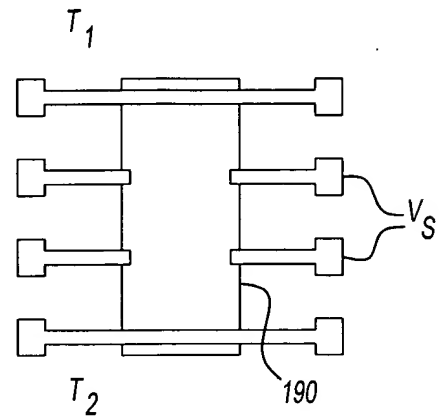


Fig-16D

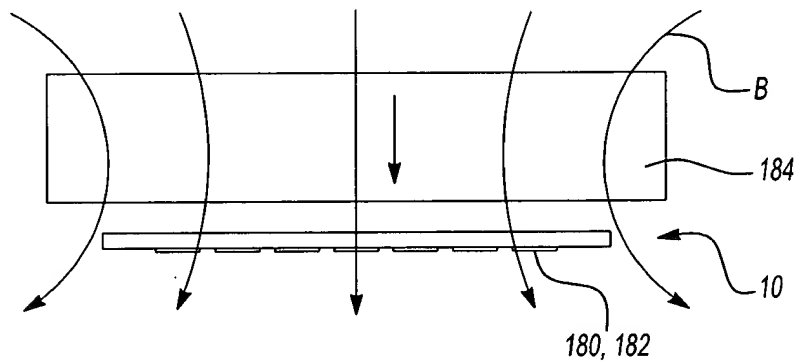




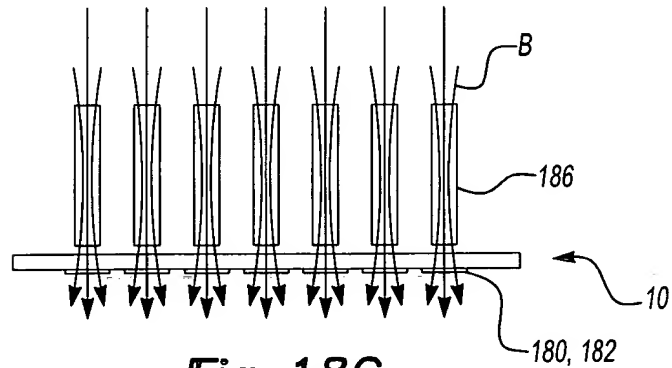
**Fig-18A**



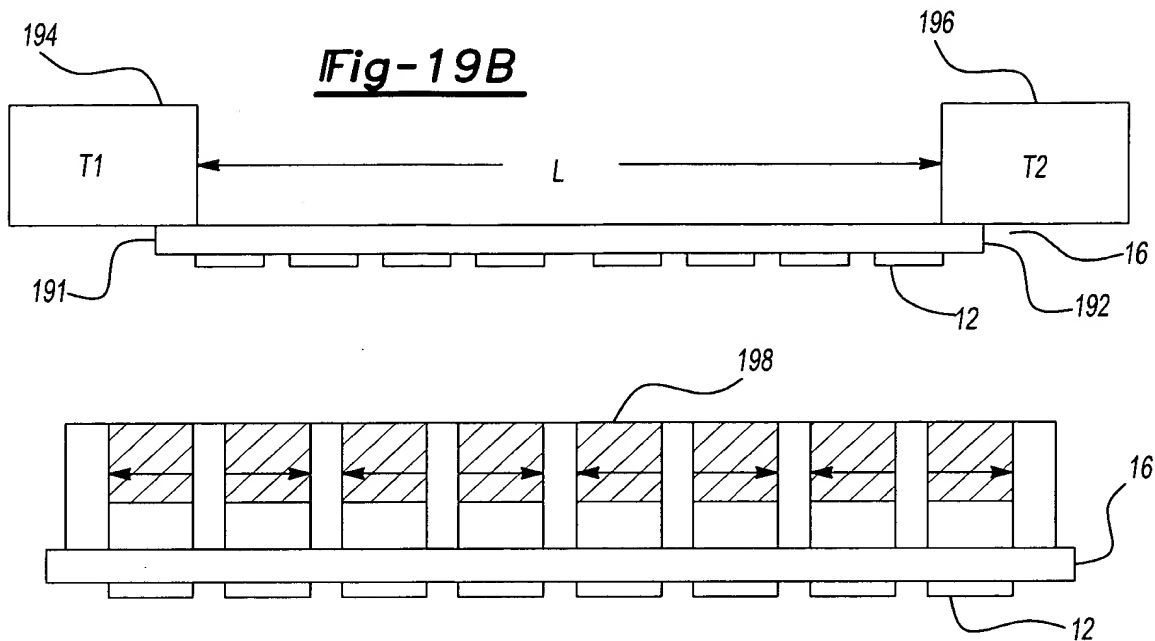
**Fig-19A**



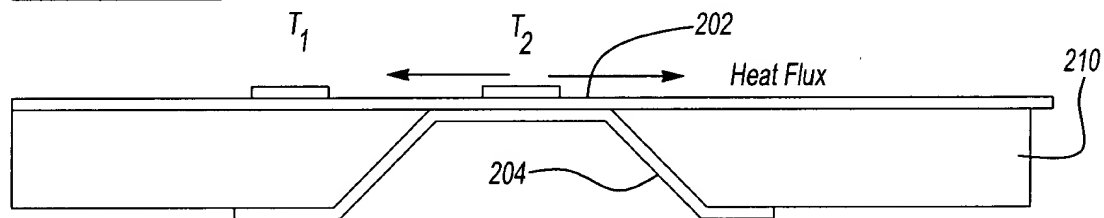
**Fig-18B**



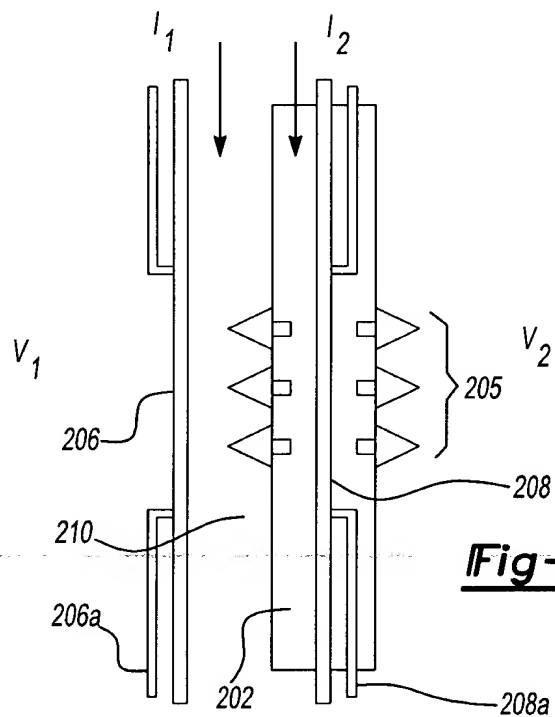
**Fig-18C**



**Fig-19C**

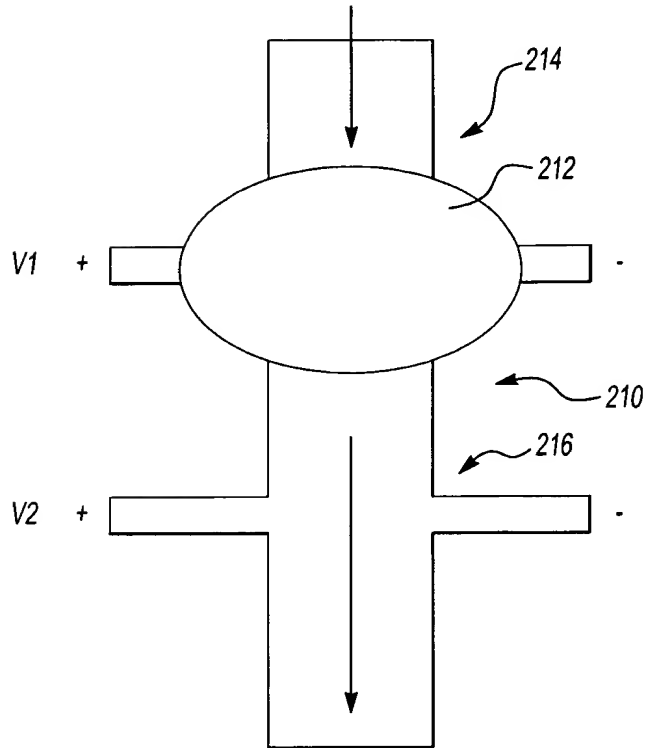


**Fig-20A**

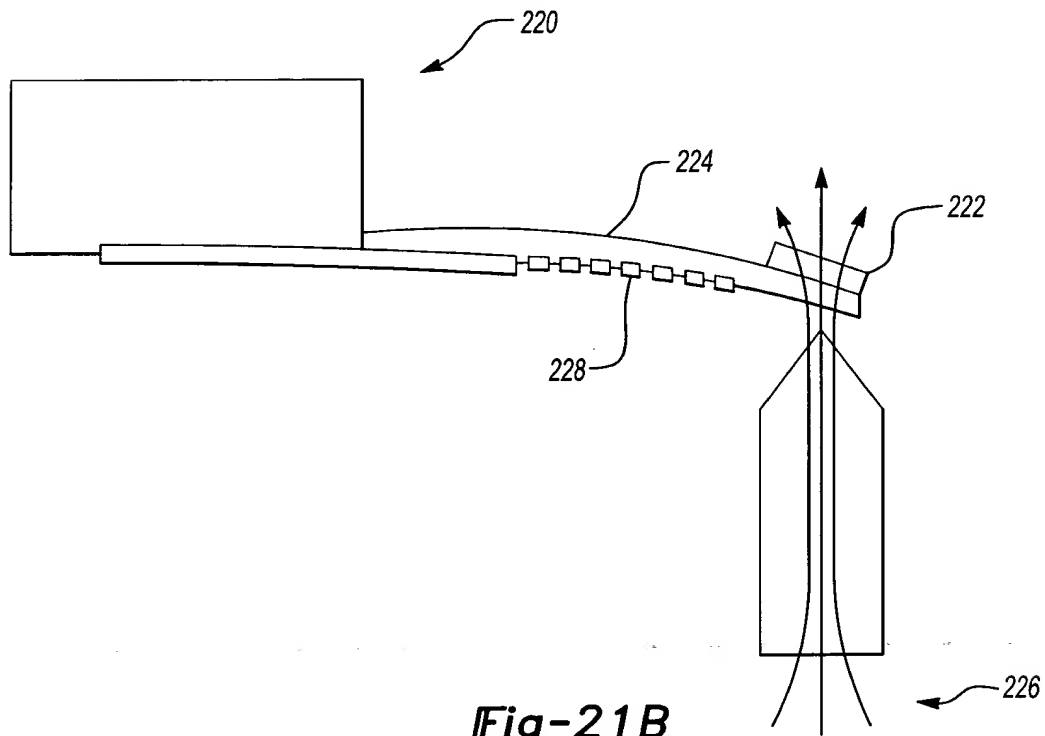


**Fig-20B**





**Fig-21A**



**Fig-21B**